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DATE: Tuesday, May 11, 2004

Hide?	Set Name	Query	Hit Count
	DB=USPT; PLUR=YES; OP=AND		
☐	L1	(shiga$ or slt$ or vt$ or verotoxin$ or stx$).ti,ab,clm.	2446
☐	L2	coupl$ or complex$ or join$ or link$ or covalent$ or conjugat$ or combin$	2573406
☐	L3	$conjugate	39521
☐	L4	(L3 or l2) ti,ab,clm. and l1	0
☐	L5	(L3 or l2).ti,ab,clm. and l1	1069
☐	L6	0157 or 0-157 or o:157 or o157$ or 0157$ or 0-157$ or o:157$	12492
☐	L7	l1 same l6	6
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=AND		
☐	L8	0157 or 0-157 or o:157 or o157$ or 0157$ or 0-157$ or o:157$	46030
☐	L9	coupl$ or complex$ or join$ or link$ or covalent$ or conjugat$ or combin$	7238365
☐	L10	$conjugate	93647
☐	L11	(L10 or l9) same l8	414
☐	L12	(shiga$ or slt$ or vt$ or verotoxin$ or stx$)	202631
☐	L13	L12 same l11	31

END OF SEARCH HISTORY

The Journal of
Infectious Diseases
Published by the University of Chicago Press

Title *Escherichia coli* O157 Fails to Induce a Long-Lasting Lipopolysaccharide-Specific, Measurable Humoral Immune Response in Children with Hemolytic-Uremic Syndrome

Author(s) Kerstin Ludwig, Martin Bitzan, Christoph Bobrowski, and Dirk E. Müller-Wiefel

Identifiers *The Journal of Infectious Diseases*, volume 186 (2002), page 566
DOI: 10.1086/341781
PubMed ID: 12195387

Abstract *Escherichia coli* O157 lipopolysaccharide (LPS)–specific antibodies were measured in sequential serum samples from 131 children with serologically defined *E. coli* O157–associated hemolytic-uremic syndrome (HUS), using an enzyme immunoassay. On the basis of evaluation of 66 children with culture-proven *E. coli* O157 infection and serum samples from 132 age-matched control subjects, the assay showed a sensitivity of 95%, 88%, and 74% and a specificity of 99%, 99%, and 98% for IgM, IgA, and IgG, respectively. Anti-O157 LPS antibodies decreased below the cut-off levels in >50% of the children at 11 (IgM), 5 (IgA), and 11 weeks (IgG) after onset of diarrhea and 10, 4, and 10 weeks, respectively, after the onset of HUS. Children with enteropathic HUS fail to develop a long-lasting humoral immune response to the O157 antigen. Incomplete immunity to *E. coli* O157 may signal a risk for recurrent infections and has implications for serodiagnostic studies.

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L13: Entry 13 of 31 File: USPT Oct 21, 2003

DOCUMENT-IDENTIFIER: US 6635259 B2
TITLE: Escherichia coli secreted protein B

Detailed Description Text (86):
39. Barrett, T. J., J. H. Green, P. M. Griffin, A. T. Pavia, S. M. Ostroff, and I. K. Wachsmuth 1990. Enzyme-linked immunosorbent assays for detecting antibodies to Shiga-like toxin I, Shiga-like toxin II, and Escherichia coli O157:H7 lipopolysaccharide in human serum. Curr. Microbiol. 23:189-195.

Other Reference Publication (43):
Barrett et al., "Enzyme-linked immunosorbent assays for detecting antibodies to Shiga-like toxin I, Shiga-like toxin II, and E. coli O157:H7 lipopolysaccharide in human serum," Curr. Microbiol. 23:189-195 (1991).

1: Search Konadu E[au] : 5 Select from History

Search PubMed for Konadu E[au] Search

Items 1-5 of 5

1: Phase 1 and phase 2 studies of Salmonella enterica serovar paratyphi A O-specific polysaccharide-tetanus toxoid conjugates in adults, teenagers, and 2- to 4-year-old children in Vietnam. Related Articles, Books, LinkOut
Konadu EY, et al.
Infect Immun. 2000 Mar;68(3):1529-34.
PMID: 10678970 [PubMed - indexed for MEDLINE]

2: Syntheses and immunologic properties of Escherichia coli O157 O-specific polysaccharide and Shiga toxin 1 B subunit conjugates in mice. Related Articles, Cited in PMC, Books, LinkOut
Konadu E, et al.
Infect Immun. 1999 Nov;67(11):6191-3.
PMID: 10531288 [PubMed - indexed for MEDLINE]

3: Investigational vaccine for Escherichia coli O157: phase 1 study of O157 O-specific polysaccharide-Pseudomonas aeruginosa recombinant exoprotein A conjugates in adults. Related Articles, Cited in PMC, Books, LinkOut
Konadu EY, et al.
J Infect Dis. 1998 Feb;177(2):383-7.
PMID: 9466525 [PubMed - indexed for MEDLINE]

4: Synthesis, characterization, and immunological properties in mice of conjugates composed of detoxified lipopolysaccharide of Salmonella paratyphi A bound to tetanus toxoid with emphasis on the role of O acetyls. Related Articles, Free in PMC, Cited in PMC, Books, LinkOut
Konadu E, et al.
Infect Immun. 1996 Jul;64(7):2709-15.
PMID: 8698499 [PubMed - indexed for MEDLINE]

5: Preparation, characterization, and immunological properties in mice of Escherichia coli O157 O-specific polysaccharide-protein conjugate vaccines. Related Articles, Free in PMC, Cited in PMC, Books, LinkOut
Konadu E, et al.
Infect Immun. 1994 Nov;62(11):5048-54.
PMID: 7927787 [PubMed - indexed for MEDLINE]

Items 1-5 of 5

Help

L13: Entry 17 of 31 File: USPT May 21, 2002

DOCUMENT-IDENTIFIER: US 6391652 B2
TITLE: Immunoassay method and immunoassay kit

Abstract Text (1):
An immunoassay method comprising bringing an immobilized phase comprising, at different positions on a water-absorbable base material, at least two first immunity substances capable of specifically binding with at least two kinds of assay target substances selected from the group consisting of verotoxin-producing Escherichia coli, verotoxin and human hemoglobin contained in a test sample, into contact with a test sample and a liquid containing labeled immunity substances each comprising a second immunity substance that is labeled with colored particles and capable of binding with said assay target substance, thereby to form an assay target substance-labeled immunity substance complex and to bind said complex with respective first immunity substances at the immobilized phase. The immunoassay method, the immunoassay device and the immunoassay kit of the present invention enable easy and simultaneous analysis of O157 (VTEC), VT and Hb in a test sample, by adsorption of the assay target substances on an immobilized phase and evaluation of the developed color.

Brief Summary Text (6):
A specific detection method includes a method (trademark EHEC-TEC ELISA TEST SYSTEM, manufactured by Organon Teknika Corp.) for detecting O157 antigen, comprising culturing a food using mTSB (Tripticase Soy Broth Modified) medium and applying an ELISA method (enzyme-linked immunosorbent assay method). For the detection of verotoxin production by Escherichia coli separated from food, a method (trademark, Verotox-F "SEIKEN", manufactured by Denka Seiken Co., LTD.) includes culture thereof in a CA-YE medium and detection of verotoxin 1 and verotoxin 2 by latex agglutination test using supernatant as a test sample.

Detailed Description Text (47):
Tables 1-3 show the assay results when each assay target substance was used alone or in combination in the test sample. Escherichia coli O157:H7 used did not produce verotoxin, so that assay results of a mixed test sample would not be influenced. In each Table, the evaluation criteria were as follows.

Detailed Description Text (66):
Tables 10-13 show the assay results when each assay target substance was used alone or in combination in the test sample. Table 14 shows the assay results when each test sample was mixed and subjected to the assay. Escherichia coli O157:H7 used did not produce verotoxin, so that assay results of a mixed test sample would not be influenced. In each Table, the evaluation criteria were as in Example 1.

L13: Entry 22 of 31 File: USPT Jun 27, 2000

DOCUMENT-IDENTIFIER: US 6080400 A
TITLE: Compositions for the prevention and treatment of verotoxin-induced disease

Brief Summary Text (20):
Verotoxins are strongly linked to E. coli O157:H7 pathogenesis. All clinical isolates of E. coli O157:H7 have been shown to produce one or both verotoxins (VT1 and VT2) (C. A. Bopp et al., "Unusual Verotoxin-producing Escherichia coli associated with hemorrhagic colitis," J. Clin. Microbiol., 25: 1486-1489 [1987]). The VT1 and VT2 genes are carried by temperate coliphages 933J and 933W, respectively. Once lysogenized, these coliphages lead to the expression of toxin genes by the E. coli host.

L13: Entry 25 of 31 File: USPT Mar 31, 1998

DOCUMENT-IDENTIFIER: US 5733736 A
TITLE: Motility channel pathogen detector and method of use

Brief Summary Text (7):
The third category is characterized as immunological detection of the Shiga-like toxins, and involves immunoblotting with polyclonal antibodies for detection verotoxins of E. coli 0157:H7, or with monoclonal antibodies for detection of a 0157 antigen. As described in more detail in U.S. Pat. No. 5,168,063 to Doyle et al. al. at Col. 5, lines 29-Col. 8, line 19, such immunological detection methods may include production of a hybridoma generated monoclonal antibody specific to E. coli 0157:H7; binding the antibody to an adsorptor substrate; exposing a sample of a potential pathogen to the substrates; and using a quantitative and comparative assay (such as an enzyme-linked immuno-sorbent assay ("ELISA")) to test for the presence of E. coli 0157:H7. While such techniques have a high degree of accuracy and can reduce the total detection time to about two days, implementation of such methods requires a skilled technician to perform the steps; involves a substantial cost to acquire the specific antibodies and assay components; and requires a high quality laboratory environment to properly carry out such a test.